OWNERS MANUAL

CONTENTS

PAGE 3	GLOSSARY OF PARTS: Right hand side of the bike
PAGE 4	GLOSSARY OF PARTS: Left hand side of the bike
PAGE 5	INTRODUCTION:
PAGE 5	GETTING TO KNOW YOU ORI
PAGE 5	BEFORE RIDING:
PAGE 5	MAXIMUM WEIGHT LIMIT:
PAGE 6	SAFETY:
PAGE 7	ORI PRE-RIDE CHECK:
PAGE 7	CHECK-LIST:
PAGE 8	RIDING:
PAGE 8 & 22-24	FOLDING:
PAGE 8	INSTANT REBOUND CATCH:
PAGE 8	DROPOUT CATCH:
PAGE 8-9	BRAKES:
PAGE 9	SEAT POST:
PAGE 9	FASTENERS:
PAGE 9	AREAS OF ADJUSTMENT:
PAGE 9	SADDLE HEIGHT:
PAGE 10	SADDLE FRONT AND BACK ADJUSTMENT:
PAGE 10	HANDLEBAR HEIGHT:
PAGE 10	HANDLEBAR ROTATION:
PAGE 11	BRAKE LEVER POSITION:
PAGE 11	BRAKE LEVER 'REACH':
PAGE 11	TYRE PRESSURES:
PAGE 11	SPARES:
PAGE 12	HOW TO REMOVE FRONT AND REAR WHEELS IN THE EVENT OF PUNCTURES:
PAGE 12-14	FRONT WHEEL REMOAL：
PAGE 14	FRONT WHEEL QUICK RELEASE COMPONENTS:
PAGE 15	
PAGE 15	
PAGE 16	REAR WHEEL REMOVAL: M9 Model
PAGE 16	REAR WHEEL REFITTING: M9 Model
PAGE 16	CHAIN TENSION: M9 Model
PAGE 16	ROUTINE MAINTENANCE:
PAGE 16	CLEANING:
PAGE 17	SHIMANO PARTS:
PAGE 17	DRIVE TRAIN:
PAGE 17	BRAKE ADJUSTMENT:
PAGE 18	TYRES:
PAGE 18	WHEELS:
PAGE 18	STEERING:
PAGE 18	SEAT POST:
PAGE 18	CLTP CATCH:
PAGE 19	LUBRICATION:
PAGE 19	LUBRICATE THE FOLLOWING AREAS:
PAGE 20	DO NOT LUBRICATE THE FOLLOWING AREAS:
PAGE 20-21	TERMS AND CONDITIONS:
PAGE 22	HOW TO UNFOLD YOUR ORI:
PAGE 23	HOW TO LAZY FOLD YOUR ORI:
PAGE 24-25	HOW TO FOLD YOUR ORI:
PAGE 25	TIPS FOR CARRYING THE ORI:

STANDING ON THE RIGHT-HAND SIDE OF THE BIKE

Number	Component Description
1	Grip
2	Handlebars
3	Upper Stem Clamp
4	Brake Lever
5	Gear Shifter
6	Upper Handlebar Stem
7	Upper Handlebar Stem Clamp
8	Upper Hinge Parts
9	Front Instant Rebound Catch
10	Lower Hinge Parts
12	Lower Stem
13	Headset
14	Lockstop
15	Front Brake Calliper
16	Front Wheel
17	Front Wheel Quick Release Nut
18	Front Forks
19	Front Mudguard
20	Dropout catch

Number	Component Description
21	Mainframe
22a	Right-Hand Pedal
23a	Right-Hand Crank Arm
24	Chain Set
25	Chain
26	Swinging Arm
28	Clip Catch
29	Rear Derailleur
30	Rear Wheel
31	Quick Release Nut
32	Cassette
33	Rear Rack
34	Rear Brake Calliper
35	Rear Instant Rebound Catch
36	Seat Clamp Quick Release Lever
37	Seat Post
38	Saddle Clamp Bolt
39	Saddle
40	Replaceable Rear Mech Hanger

Number	Component Description
1b	Left-Hand Handlebar Grip
4b	Left-Hand Brake Lever
11	Secondary Safety Clip (Optional)
17a	Front Wheel Quick Release Lever (QR)
20	Dropout Catch
22b	Left-Hand Pedal
23b	Left-Hand Crank Arm
27	Swinging Arm Pivot
31b	Quick Release Lever

GLOSSARY:

There are also a few technical terms for parts and tools used in this manual that are not shown in the glossary of parts above. They are:

Dropout	The dropouts are the parts of the frame and front fork that the wheels slot into.
Socket Head Cap Screw	Also known as an Allen Bolt, this is a bolt with a hexagonal cut out in its head. An Allen Key is required to tighten /loosen. Used all over your ORI .
Torque	A twisting force, in this case relating to the tightness of a nut and bolt, screw or quick release.
Torque Wrench	A tool for setting and adjusting the tightness of nuts and bolts to a desired value.
Clip catch	Adjustable clip used for securing the front wheel assembly to the side of the bike when folded.

INTRODUCTION:

Congratulations, and thank you for choosing ORI.

Your ORI has been designed and produced to make the most of the fantastic benefits that our advanced and unique design offers, and to provide you with the best possible performance for many years to come. To get the best from your new bike, and for your own safety, it is very important that you fully understand the operation of the ORI folding bike before riding.

This owner's manual assumes a working knowledge of bicycles and an understanding that the regular inspections and maintenance which are outlined are essential to ensure the safe performance and longevity of your bike. If you are not experienced in owning and riding a bicycle, always consult your ORI dealer about impor tant issues This is especially important with any folding bike.

Please read, understand and digest all the sections that apply to your bike before riding your bike for the first time.

The ORI has passed the arduous Din testing standard. This means ORI has been tested for its intended use of general road riding. Do not ride your ORI on rough off-road terrain. Incorrect use can lead to serious injury.

GETTING TO KNOW YOUR ORI

BEFORE RIDING:

The ORI is folded and unfolded in a series of individual steps. It is important that these steps are made in the correct sequence, to ensure the most efficient and safe folding and un-folding. Please take some time to refer to the ORI Folding Bike Folding Sequences on pages 22-25.

You should receive your ORI folding bike in its shipping box. It is important to undertake a comprehensively check of your bike to satisfy yourself the bike is in a safe condition to ride. Please refer carefully to all the sections below.

Remove all extraneous packaging and protective material from the bike.
You will need to unfold the bike and perhaps make some adjustments to accommodate your requirements for fitting the bike correctly.

MAXIMUM WEIGHT LIMIT:

The maximum combined weight of rider and luggage should not exceed 110kg.

SAFETY:

Quick Release Levers

The first Quick Release lever was designed and patented in 1930 by the Italian designer Tullio Campagnolo, and since then has become an industry standard fastening technique for the bicycle.

The ORI folding bike uses Quick release levers in two places during the folding and unfolding of your bike. It is extremely important for your own safety that you understand and can operate the Quick Release Mechanism correctly and safely. Please refer to the folding and unfolding sequence section of this manual.

The Quick Release mechanism is essentially a simple over-centre cam device with two positions. Open and Closed.

Open Position:
In the open position, the lever freely rotates and nothing is clamped or retained.
The 'OPEN' mark is displayed on the lever.

Closed Position:
To close the Quick release mechanism, the lever must be rotated so the lever operates the cam and clamps the mechanism it is restraining.
The 'CLOSED' mark is displayed on the Lever.

Tightening Quick Release Levers:
No Torque settings are specified for Quick release mechanisms. However you should adjust the Quick release mechanism with the QR nut, so as to feel resistance just before half way through the travel range when in the process of tightening the QR by swinging the lever around from the 'Open' position to the 'Closed' position.

We recommend a closing force on the Quick Release Lever, applied tangentially to the lever, of approximately 130N, which if measured using a spring balance, a load of 13kg.

IMPORTANT SAFETY NOTE: Do not attempt to use the Quick Release lever as a 'wing nut' style fastener.

!WARNING

Failure to properly operate and install the Quick release hub, may cause the wheel and mudguard to become detached from the bicycle while you are riding resulting in a serious accident.

ALWAYS CHECK BEFORE RIDING.
IF YOU HAVE ANY QUESTIONS, ASK YOUR DEALER.
IMPROPER USE CAN RESULT IN SERIOUS BODILY INJURY.

ORI PRE-RIDE CHECK :

All ORI bikes undergo a Pre-Delivery Inspection check by your Dealer before you collect your bike, however it is important before every ride, to run through a 'pre-ride check' to ensure the bike is completely safe to ride. If you are unsure about any area in the list below and do not feel confident to make necessary adjustments, do NOT ride the bike, and contact your ORI Dealer .

CHECK-LIST:

Frame / Fork / Swinging Arm: Check the condition and integrity.

Handlebar / Upper Stem / Lower Stem position: Check the Stem is not above the minimum insert mark. Check for looseness by trying to move the handlebars from side to side / forward and back. Handlebar grips are secure and not rotating. Handlebar ends are plugged.

Front Hinge Instant Rebound Catch : Check that the Catch is pressed fully closed and the Secondary Safety Clip is engaged into its recess. Check for excessive looseness in the Hinge Catch mechanism by pulling up and down on the handlebar grips.

Rear Instant Rebound Catch: Check that the Catch is pressed fully closed. Check for excessive looseness in the Catch mechanism by lifting the bike up and down by the saddle.

Front Wheel Dropout Catch: Check that the Front wheel is FULLY located into the fork dropouts. Check that the Dropout Catch is in the Down Position, and check that the QR Lever is tight. If necessary, re-operate the QR Lever to increase the tightness and security of the Front Wheel. It is of vital importance that the Front Wheel is securely held in the Fork Dropouts.

Brake Levers and Shifter: Check for looseness by trying to rotate the levers on the handlebars.

Headset: With the front brake applied, check for play in the headset bearing by rocking back and forth on the handlebars.

Wheels (General): No play in either front or rear hubs, No broken or loose spokes, Check Quick release mechanisms are correctly closed and are tight.

Tyres: Check inflated pressure is correct (Very Important for efficient riding) Check for correctly seated tyre walls. Clean any dirt obscuring the reflective sidewall strip. Check for deep cuts in the tread caused by glass or other debris which could lead to punctures.

Brakes: Check both brake levers are operating the respective brakes correctly, and the bike can be stopped by either or both brakes being applied.

Chain and Chainset: Running freely and gears operate satisfactorily and sufficient lubrication of moving parts has been undertaken.

Pedals: Check that the Pedals have been unfolded correctly, and are not unscrewing from the chainset.

Saddle: Check the Saddle height is set to the desired height but not above the minimum insert mark. Check for looseness in the Saddle and Seat Post QR Clamp by trying to twist the saddle from side to side.

Reflectors and Lights: Clean reflector lenses. Check lights operate correctly (if fitted).

RIDING:

The ORI folding bike has been designed and developed to ride as safely and securely as any other standard bicycle. 16" x 1-3/8"wheels will mean that handling characteristics will feel slightly different from conventional 26" or 700c wheel bikes, but not in any way to the detriment of handling or safety on the road.

For riding advice and safety on the road, we recommend that the rider reads, understands and complies with all the relevant sections of the Highway Code. For rider training, we recommend the rider contacts a nationally recognised organisation, such as the CTC in the UK.

In addition to this manual, we also recommend the rider thoroughly reads the documentation from the component manufacturers supplied with this bike that relates to riding and the safe operation of the bike. For example: Shimano Nexus Inter-8 Hub gear operation, adjustment and service instructions.

The rider should always complete the pre-ride check, before every ride. In addition to this, for long term safe riding, the rider also conducts periodic checks on other components in accordance with the Routine Maintenance section of this manual.

FOLDING:

The folding structures of the ORI incorporate clamping mechanisms and it is essential you fully understand their operation and function. Failure to operate these clamping mechanisms in the correct manner could result in an unsafe and dangerous bike to ride. Make sure that your ORI dealer fully familiarise you with the folding clamping mechanisms on your ORI.

INSTANT REBOUND CATCH

The INSTANT-REBOUND CATCHES ORI folding bike are a new innovation in the Folding Bike market. They have been developed and tested to enable ease of use and provide the quickest folding and unfolding possible. The Catches are spring loaded to constantly act to close the joint and have been engineered to allow for adjustment over time to combat normal and expected wear and tear.

It is important that both front and rear INSTANT-REBOUND CATCHES are fully pressed closed and and that the optional front secondary safety clip if fitted is engaged before you ride the bike.

DROPOUT CATCH:

The Dropout catch on the front fork of the ORI folding bike, is an extremely important mechanism to operate correctly. Failure to operate the Dropout Catch and the Front Wheel Quick Release mechanism correctly could result in the wheel unexpectedly coming out of the fork dropouts, causing an accident and serious injury could result.

BRAKES:

Using the braking system of the bike in an improper manner, could lead to loss of control or cause an accident, leading to severe injury. We recommend that you take time to gain experience of how to apply the correct brake lever pressure to stop the bike safely, together with reading and applying all relevant passages of the Highway Code to your riding. Please note that braking performance is reduced in the wet. A larger stopping distance is required in wet or icy conditions.

It is very important to prevent all lubricants from coming into contact with the brake pads and wheel rims. If lubricant does contact the brake pads, you should replace the contaminated pads, because the brakes may not work correctly otherwise.

As outlined in the pre-ride check section, check that both front and rear brakes are functioning satisfactorily before riding the bike.

The ORI comes set up with the brakes working as ollows. As you sit on the Bike , the Right Hand brake lever operates the front brake, and the Left Hand brake lever operates the rear brake.

Please note, that parts are not guaranteed against natural wear or deterioration resulting from normal use.

SEAT POST:
The folding nature of the ORI means that for a single folding and unfolding cycle, the seat post will be pushed down and then pulled up. Check your seat post regularly for wear and scratches. Scratches running across the post (not up and down) can cause areas of stress concentration, which could lead to seat post failure. Please refer to the maintenance section for more information.

FASTENERS:
Using a torque wrench periodically, or whenever conducting routine maintenance, check that the tightness of all important screws are to the recommended settings. If you are unsure, get your ORI dealer to inspect and check all important fasteners.

AREAS OF ADJUSTMENT:

SADDLE HEIGHT:
No Tools required:
Tightening Torque: See Quick Release (QR) Tightening in the Safety Section
The adjustment of the saddle height is made by releasing the QR lever at the Mainframe, and sliding the saddle up and down to the height required.

The correct method for determining your own personal saddle height can vary from person to person, but as a rule of thumb, measured from the pedal at the bottom of the crank stroke (6 'o'clock) to the middle of the top of the saddle, a distance equivalent to 90% of your own inside leg measurement should be a reasonable starting point from which to 'fine tune' to your own preference.

Once the height has been set to the desired level, close the QR Lever. Make sure that after adjusting the seat height, you ensure the saddle is secure and aligned correctly to the centreline of the bike, as a misaligned saddle will be uncomfortable to ride on. Note that the height of the saddle can be recorded using the scale permanently marked on the Seat Post.

IMPORTANT SAFETY NOTICES:

1. If you are unsure of how to operate a QR Lever, refer to the relevant section on Quick Release operation in this manual.

2. Never have less than the minimum amount of Seat Post inserted into the Mainframe. (The minimum insert mark is marked on the Seat Post, and is approximately 100mm from the bottom of the Seat Post)

SADDLE FRONT AND BACK ADJUSTMENT:

Tools Required: 6mm Allen Key
Tightening Torque: M7 fastener: 18Nm
The saddle can be adjusted to move it closer or further away from the handlebars. The saddle rail slots are to fit standard 7mm rails. To adjust this position, you need to loosen the M7 socket head cap screw with the 6mm Allen key (there is no need to completely disassemble the clamp) and slide the saddle forward or back to the desired position.

Check that the saddle is at the correct angle for riding, and re-tighten the M6 socket head cap screw to the specified torque setting.
Recheck the tightness of the M7 bolt with a torque wrench after approximately 80kms of riding.

HANDLEBAR HEIGHT:

Tools Required: 5mm Allen Key
Tightening Torque:
M6 Fastener: 7.0 - 8.5Nm
The height of the handlebars can easily be adjusted. Undo the M6 Socket head cap screw with the 5mm Allen key until the handlebar stem can easily be raised or lowered to the desired height. Make sure that the handlebars are straight and correctly aligned to the front wheel before tightening the clamp to the specified torque setting.

IMPORTANT SAFETY NOTE:

Never have less than the minimum amount of handlebar stem inserted into the Upper Hinge. (The minimum insert mark is marked on the handlebar stem, and is approximately 65mm from the bottom of the handlebar stem).

HANDLEBAR ROTATION (and effects on folding efficiency):

Tools Required: 5mm Allen Key
Tightening Torque: M6 Fastener: 12 - 14Nm
The handlebars can be rotated to provide more adjustment for the rider. It is worth noting however, that in the extreme ranges of adjustment the folding size will increase as the handlebars will not fold inward as closely, and thus will protrude further from the bike. To adjust the position of the handlebars undo the 2 M6 socket head cap screws with the 5mm Allen key. The handlebars can now be rotated 'forward' and 'back' relative to the seated position.

IMPORTANT SAFETY NOTE:

Never try and turn the handlebars with the clamp partially undone. Turning the handlebars in this manner increases the risk of scoring the handlebars, which significantly reduces the fatigue life of the handlebar which could result in failure of the component and serious injury to the rider.

The handlebars have been designed with a 6 degree sweep, to further enable different hand positions to be obtained. Once you are happy with the position of the handlebar, tighten the 2 M5 socket head cap screws to the specified tightening torque.

BRAKE LEVER POSITION (and effects on folding efficiency):
Tools Required: 5mm Allen Key
Tightening Torque: M6 Fastener: 6 - 8Nm
The brake lever position can be rotated on the handlebars. To adjust the position of a brake lever, undo the M6 socket head cap screw with the 5mm Allen key, until the brake lever can be freely moved. It is worth noting that in extreme ranges of adjustment the folding size will increase as the brake levers will not fold inward as closely, and cause them to protrude further from the bike. IMPORTANT: do not partially undo the socket head cap screw and try and force the brake lever to turn, as scoring the handlebars can reduce the fatigue life of the handlebar.

BRAKE LEVER 'REACH'
Tools Required: 3mm Allen Key
No Torque setting, adjustment only.
Adjustments can be made to the distance the lever is positioned from the handlebar, this is known as the 'reach' of the lever. Using the 2mm Allen key, simply screw in the M3 grub screw situated on the clamp body of the Brake lever. Turning clock wise will reduce the distance from the lever to the handlebar, and turning anti-clockwise will increase the distance from the lever to the handlebar. Note that from new, the lever will be positioned at maximum adjustment, i.e. farthest away from the handlebars.

WARNING:

These instructions are intended as a simple set-up guide for the rider. We strongly recommend the areas not covered by these instructions are only adjusted and serviced by your ORI dealer.

TYRE PRESSURES:
Make sure that the tyres are inflated to the correct and recommended inflation pressure. (See Side-wall of Tyre) With small 16" x1-3/8" under-inflated tyres lead to drastically reduced efficiency for the rider, wasted energy, greater rate of wear and increase risk of sustaining punctures from impact with potholes. Keep Tyre pressures near to the upper range of the recommended settings.

SPARES:
When riding the ORI we recommend the rider carry the following spares, as a minimum requirement.

1 spare inner tubes: Size 16" x 1-3/8"
Pump
A Set (usually 3 levers) of tyre Levers
A selection of Allen Keys, most important sizes are 3, 4, 5 and 6mm
15mm A/F spanner to remove i4 rear wheel nuts.
A small flat bladed screw driver to assist in disconnecting the Mi8 rear gear cable from the hub.

HOW TO REMOVE FRONT AND REAR WHEELS IN THE EVENT OF PUNCTURES:

FRONT WHEEL REMOVAL: MI8 and M9 models:
Tools Required: 3mm Allen Key
Tightening Torque: M4 Fasteners: 3.0 - 4.0Nm

The design of the ORI folding bike, means that the front wheel is retained inside the Front Mudguard. In order to remove the front wheel from the bike, the wheel has also to be removed from the front Mudguard. Please refer to the photos for each step and the diagram on page 15.

The front wheel is most easily removed when the bike is in the Lazy Fold position. Please see Lazy Fold section for more information.

Undo the brake Quick Release Lever on the side of the front brake calliper, to allow the removal of the wheel between the brake pads.

Next Undo the Front Wheel QR Lever (5) from the 'CLOSED' position to the 'OPEN' position.

Operate the Dropout Safety Catch (1) to eject the Front Wheel Mudguard from the Fork Dropouts.

Remove the QR Assembly from the front wheel by uncoupling the QR Locking Bobbin (7) and QR Chamfer Bobbin (8) on the non-lever side (7) (8). Do this by turning the QR Locking Bobbin (7) anti-clockwise, whilst at the same time turning the QR Chamfer Bobbin (8) clockwise. Once the two parts are lose, unscrew them from the QR shaft (6), and pulling the QR Lever (5) to pull the QR assembly through the wheel. Take care not loose the coil springs (10) that are part of the QR assembly. Please refer to the diagram on page 15.

Next, undo the 2 retaining screws in the right hand side mudguard split bobbin with a 3mm Allen key and remove the split bobbin cap. Pulling the mudguard stays apart; the front wheel can now be sprung out of the mudguard. The wheel can now be accessed in the normal way for maintenance or repair.

To re-install the front wheel, insert the wheel into the mudguard by pulling the mudguard stays apart, making sure the direction of rotation of the tyre is correctly orientated. Spring the mudguard apart to allow the wheel hub to sit into the bobbins.

Re-fit the split bobbin cap and tighten the M4 fasteners with the 3mm Allen key to the specified tightening torque.

Swing the front wheel into the Fork Dropouts (3) (4) as shown in the unfolding procedure.

Next, refit the QR Lever and Shaft (5) (6) and coil springs (10) as shown. Make sure the QR Lever (5) is on the same side as the Dropout Catch (1).

Next, screw the QR Chamfer Bobbin (8) onto the QR Shaft (6) until the QR Lever (5) can be closed with enough force to clamp the wheel securely. This adjustment is achieved by a trial and error process of opening the QR Lever (5) to the open position, adjusting the QR Chamfer Bobbin (8) clockwise or anti clockwise and closing the QR Lever (5) to the 'CLOSED' position until resistance is felt when closing the QR Lever (5) and the Wheel/Mudguard is secure in the Fork Dropouts (3) (4).

Once the QR Lever (5) has been correctly adjusted, close the QR Lever (5) to the 'CLOSED' position.

Screw the QR Locking Nut (8) onto the QR Shaft (6) as far as the QR Chamfer Nut (8).

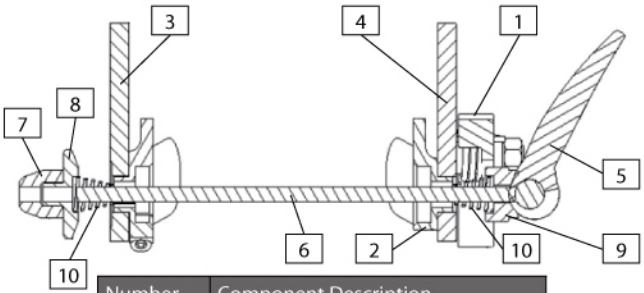
Open the QR Lever (5) to the 'OPEN' position.

Tighten the QR Locking Nut (7) clockwise whist at the same time tightening the QR Chamfer Nut (8) Anticlockwise, thus locking the two nuts together, to prevent the QR assembly from moving out of adjustment.

Close the QR Lever (5) to secure the Wheel Mudguard into the Dropouts (3) (4).

Finally, close the QR adjuster on the front brake calliper and make a final check of the adjustment of the front brake calliper.

FRONT WHEEL QUICK RELEASE COMPONENTS



Number	Component Description
1	Dropout Safety Catch
2	Front Mudguard
3	Right-Hand Fork Dropout
4	Left-Hand Fork Dropout
5	Quick Release Lever
6	Quick Release Shaft
7	Quick Release Locking Nut
8	Quick Release Chamfer Nut
9	Quick Release Lever Cam
10	Quick Release Spring

REAR WHEEL REMOVAL: MI8:
Tools required: 15mm AF spanner. Small Flat Bladed Screw Driver. Shimano technical service document SI-6E60A
Tightening Torque: 30 - 45Nm

The rear wheel of the ORI MI8 is the Nexus Inter-8 hub gear . Before the wheel can be removed, you must disconnect the shifting cable from the hub. Refer to the Shimano technical service document for the correct procedure necessary.

With the shifting cable safely removed from the rear hub, first undo the quick release lever on the rear brake to allow the wheel to pass between the brake pads.

Next undo the 15mm nuts on both sides of the wheel with the 15mm A/F spanner and noting which colour anti-rotation washer was fitted to which side, remove the nuts and anti-rotation washers. Now guide the wheel out of the dropouts, and pulling the chain tensioner backwards, guide the wheel down and clear of the bike in the normal manner. The Wheel should now be free for service and repair.

To replace the rear wheel, first pull the tensioner backward as you guide the wheel up into the dropouts, making sure that the chain is located on the sprockets, and the shifting cable receptacle is facing forward in the correct manner as described in the Shimano technical service document. With the wheel now securely in the dropouts, re-fit the anti-rotation washers respectively, and the wheel nuts. Re-tighten the nuts using the 15mm A/F spanner to the specified tightening torque.

With the wheels now securely fitted into the frame, the shift cable can now be re-fitted to the hub gear. Refer to the Shimano technical service document for correct instructions.

The last step is to close the QR on the rear brake calliper and make a final check of the adjustment of the rear brake calliper.

If you are at all unsure about removing the 8 rear wheel, refer to the Shimano Technical Service Instruction sheet

CHAIN TENSION: MI8:
The chain tension on the MI8 is controlled by the double wheeled tensioner.This device automatically keeps the chain under tension during riding and at every point during the folding of the bike. It should not be necessary for the customer to adjust the tension of the chain in any way. Consult your ORI dealer if any problem with the tension of the chain should arise.

REAR WHEEL REMOVAL: M9 Model:
No tools required.

To remove the rear wheel of the ORI M9, shift the chain into the smallest sprocket. Next undo the quick release lever on the rear brake to allow the wheel to pass between the brake pads.

Next open the Quick release lever on the rear wheel, and in the normal manner, guide the wheel out of the dropouts, whilst pulling the rear derailleur back to allow the rear wheel to come cleanly out of the frame.

The Wheel should now be free for service and repair.

REAR WHEEL REFITTING: M9 Model:
No tools required.

Refitting the wheel is essentially the reverse of the removal. Make sure you close the Quick release on the rear brake calliper and perform a check of the adjustment of the rear brake before riding. See section below on brake adjustment.

CHAIN TENSION: ORI M9 :
The chain tension on the Flight ORI is controlled by the standard rear derailleur. It should not be necessary for the customer to adjust the tension of the chain in any way. Consult your ORI dealer if any problem with the tension of the chain should arise.

ROUTINE MAINTENANCE:

There is no given rule for service intervals but usually the bike should be checked every 2000 - 4000 km under normal conditions. This service interval may vary in case of rain, dust, hard use or other variables that may require the bicycle to be serviced more frequently. Repairs should be carried out immediately a problem becomes apparent. This increases safety and reduces repair costs by avoiding secondary damage. Handlebars should be replaced periodically, or following a crash that inflicts any visible damage to the bars, controls or grips. The recommended interval between bar replacements is 3 years or 40,000 km - whichever is sooner. Only replace the bars with a standard ORI bar , or you will adversely affect folding performance.

CLEANING:
In order to make routine maintenance easier and quicker, we recommend cleaning your ORI regularly. As well as mak ing the use of the bike more enjoyable, the process of cleaning a bike, is in itself a good way of giving the bike a good overall check. Many elements of the 'Pre-Ride Check' can be covered whilst in the process of cleaning the bike.

When cleaning the bike NEVER use high pressure hoses or jet washes. These can lead to forced ingression of dirt, and other contaminants into moving parts as well as into the frame itself. We recommend cleaning the bike using a bristly brush, with warm soapy water, and remove all mud and dirt, especially in areas near moving parts, such as inside the mudguards. Then wash the soapy water away with a sponge and wipe the bike clean with an old towel.

SHIMANO PARTS:
For up to date Shimano technical information, please refer to the relevant model service guide on-line, or contact your local ORI dealer or Shimano Service centre.

DRIVE TRAIN (chain, sprocket(s) chain ring, derailleur/tensioner):
We recommend that you take time to first clean then lubricate the drive train on a regular basis, to reduce the potential for accelerated wear brought about by ingression of salt, mud and water etc.
Refer to the Lubrication table for the necessary maintenance information.

BRAKE ADJUSTMENT:
Tools Required: 5mm Allen Key
Tightening Torque: Brake Calliper Mounting Bolt: 8 - 10Nm: Brake Pad Bolts: 5 - 7Nm: Cable Bolt: 6 - 8Nm

Both front and rear brakes on all ORI folding bikes are the dual pivot calliper types. The set up and initial adjustment should be completed at the Factory and checked again by your ORI ealer before you purchase your bike .

Over time and after extensive use especially in periods of prolonged wet weather, you will need to check your brake pads for wear, and be prepared to adjust the brakes as the pads start to wear to restore efficient braking performance. Adjustment of the brake pad position is achieved in two ways.

Barrel adjuster on the brake callipers.

Barrel adjuster on the brake lever.

Screw out either the brake lever or the brake calliper barrel adjuster until the brake pads are as close to the wheel rim surfaces as possible, without inhibiting the free rotation of the wheel.

Dual Pivot Callipers are not self-centering, and so it is important to check that both brake pads contact the rim simultaneously. If one pad contacts the rim before the other, you will need to centralise the calliper. This is done by slackening the mounting bolt with the 5mm Allen key just enough to allow the calliper to be rotated into a central position. Check that the brake pads are now contacting the wheel simultaneously, and whilst holding the pads against the wheel rim, tighten the brake calliper mounting bolt to the specified torque setting.

Note 1: When adjusting the rear brake, make sure the bike is completely unfolded.
Note 2: Some run-out (meaning it's slighty out of true) of the wheel rim is to be expected, but only in the region of 1 - 2mm maximum.

Maximum braking efficiency is gained by a true wheel, and a wheel which is buckled or has excessive run-out, must be re-trued by your ORI dealer.

TYRES:
The tyres on the ORI folding bike have been specially manufactured to offer a tread that performs well in a variety of weather conditions, together with the latest development in puncture resistant technology, the 'Kevlar Inside' strip help protect against punctures. Replace worn tyres, or tyres which have bad cuts from glass or other debris.

WHEELS:
It is normal for any spoke wheel, to settle in after approximately one months of normal riding. It is especially important with the 16" wheel to get the wheel spokes re-tensioned after this first months use. After this, the spokes should not need any periodic adjustment, except to make regular inspections for loose or broken spokes.

The braking surface of the wheel rims will wear with normal use. Regularly inspect the braking surface of both wheel rims, and consult your ORI dealer for replacement wheel rims after approximately 1 year or 5000 miles of normal use, whichever is sooner.

STEERING:
Inspect the head bearings, and check for any play as recommended in the pre-ride check. We recommend servicing the headset every 6 months, usually before and after the winter months.

SEAT POST:
It is important that you maintain and inspect the Seat Post.

Check the Seat Post for sharp edges where the Seat Post enters the mainframe. Also inspect for dents and other deep scratches and gouges, ideally before each ride. Replace any Seat Post that has dents and other deep scratches and gouges immediately, and destroy the damaged Seat Post for safety reasons.

Sharp edges, dents and deep scratches induce stress concentration areas which could result in Seat Post failure.

CLIP CATCH:
The Clip catch is designed to be adjustable . On the top and the bottom of the Clip catch you will find a grub screw. Using a 3mm Allen key screw both grub screws in (Clockwise) half a turn each to increase the force required to push and pull the Mudguard stay into and out of the catch . Conversely screw both grub screws out (Anti-Clockwise) half a turn each to reduce the force required to push and pull the Mudguard stay into and out of the catch. (See Step 10: To Fold Your ORI)

The rubber insert in the catch is replaceable when it wears out. Contact your ORI dealer for further information.

WARNING:
As with all mechanical components the bicycle is subjected to wear and high stresses. Different materials and components may react in different ways. If the design life of a component has been exceeded it may suddenly fail, possibly causing injuries to the rider. Any form of crack, scratches or change of colouring in highly stressed areas indicate that the end of the components life has been reached and it should be replaced.

LUBRICATION:

LUBRICATE THE FOLLOWING AREAS:

The following regime of lubrication should be undertaken. Always wipe away any excess lubrication. Note: We Recommend 3-in-1 with PTFE aerosol lubricant. For Grease, any good quality lithium based grease.

* Refer to component manufacturer's service instructions

Component	Freq. of Lubrication	Areas to Lubricate	Type of Lubrication	
Brake Levers:	Once a month	Lever Pivot Cable Nipple Barrel	Waterproof Grease	1
Gear Shifters:	Once a month		3-in-1 with PTFE	*
Front Instant Rebound Catch:	Once a month	Catch Pivots, Hinge Pivots	3-in-1 with PTFE	2
		Catch Bar	Waterproof Grease	
Rear Instant Rebound Catch:	Once a month	Catch Pivots, Catch Bar	3-in-1 with PTFE	3
		Catch Bar	Waterproof Grease	
Fork Dropout Catch:	Once a month	Catch Pivot	3-in-1 with PTFE	4
Front Mudguard Pivot:	Once a month	Both sides of Pivot	3-in-1 with PTFE	5
Headset:	Every six months	(Strip and re-assemble)	Waterproof Grease	
Front/Rear Brakes:	Once a month	Calliper Pivots	3-in-1 with PTFE	6
Chain:	Every ride	Chain Links	3-in-1 with PTFE	7
Rear Derailleur:	Every ride	Mechanism and Wheels	3-in-1 with PTFE	8
Front Wheel QR:	Once a month	Cam & Cam Pivot QR Axle	3-in-1 with PTFE Waterproof Grease	9
Seat Post QR:	Once a month	Cam Surface & Cam Pivot	3-in-1 with PTFE	10
Flight Rear Wheel QR:	Once a month	Cam & Cam Pivot QR Axle	3-in-1 with PTFE Waterproof Grease	*

DO NOT LUBRICATE THE FOLLOWING AREAS:

Component	Reason for no Lubrication	
Front Mudguard Dropout Faces	Retain Clamping Friction of Quick Release	1
Front Fork Inside Dropout Faces	Retain Clamping Friction of Quick Release	2
Rear Swinging Arm Pivot Bearings	Sealed Bearings	
Seat Post	Retain Clamping Friction	3
Upper Handlebar Stem	Retain Clamping Friction	4
Front Hub	Sealed Unit	
Rear Hu	Sealed Unit	

This ORI bike is sold subject to the terms and conditions set out below :
("Terms and Conditions")

By using the bike (or by allowing it to be used) you will be deemed to have accepted the Terms and Conditions and be bound by them. You may return the bike unused for a full refund.

A copy of the manual with instructions for folding and unfolding the bike together with details of necessary pre-ride checks and other guidance for maintenance is contained within the packaging. A demonstration of the correct way to fold and unfold the bike is also available for viewing on our website at www.ORIbikes.com. Our authorised dealers will also demonstrate the folding and unfolding procedures to you, a list of our authorised dealers is on our website.

TERMS AND CONDITIONS:

The bike if it is assembled and used in accordance with the instructions and guidance contained in the manual (and provided it has been unfolded as pictured in the manual, or our website) will be safe, however, incorrect assembly or unfolding or use may result in serious injury or death.

You agree that you will:

(a) read the manual carefully and follow its instructions and guidance before assembling or using the bike;

(b) carry out the pre-ride checks, described in the manual, on each occasion before riding the bike; and

(c) always make sure any other users of bike carefully read the manual, view the demonstration, follow the instructions and guidance given, and carry out the pre-ride checks before they assemble, use or ride the bike.

In consideration of the sale to you of this bike you agree to:

(a) assume all the risks resulting from or arising out of incorrect assembly or use of the bike or failure to carry out properly the pre-ride checks;

(b) waive any claims you may have against ATB Sales Limited resulting from the incorrect assembly or use of the bike or your failure to carry out properly the pre-ride checks;

(c) indemnify ORI bikes and hold it harmless against all claims by other users of the bike, whom, through a failure on your part, have not read the manual carefully and viewed the demonstrations, and / or whom you have permitted to incorrectly assemble or use the bike, and / or whom you have permitted to ride the bike without carrying out properly the pre-ride checks.

And you also agree that ORI bikes will not be liable for any defect in the bike arising om fair wear or tear, wilful damage, negligence, abnormal use, a failure to follow the instructions and guidance given, misuse or alteration or repair (other than a repair carried out by an authorised dealer);

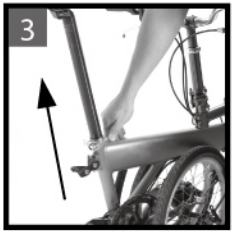
The statutory rights of the buyer are not affected by these Terms and Conditions and they do not exclude or limit ORI bikes liability for personal injury or death caused by its negligence.

NOTES:

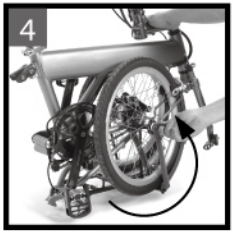
TO UNFOLD YOUR ORI STANDING ON THE RIGHT HAND SIDE OF THE BIKE:

Fold up the Handlebars until the IInstant Rebound Catch closes.

Press frmly to make sure the hinge Instant Rebound Catch is securely closed.

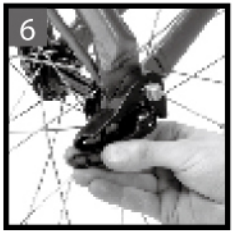


Open the Seat Clamp Quick Release and raise the Saddle to the desired mark on the Seat Post for riding. Close the Seat Clamp Quick Release.

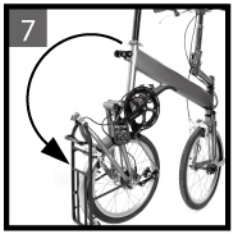


Holding the Lower Stem with your left hand, and the Front Wheel Quick Release with your right, pull the wheel towards you, releasing it from the spring clip.

Holding the Lower Stem with your left hand, and keeping the lock-stop against its stop, lift the lower stem upwards and carefully rotate the Front Wheel/Mudguard into the Front Forks. Do this slowly so that you see the Fork Leg Dropout Catch move up and back down, thereby locating and locking the wheel correctly into the dropouts.
WARNING: If you do not see the dropout catch move back down to the locked position, the front wheel may not be correctly located in the fork dropouts.

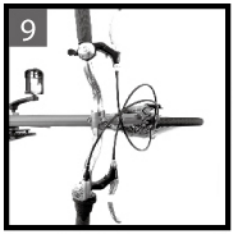


Make sure the Front Wheel is fully located into the Fork Dropouts and that the Dropout Catch is pressed fully down and closed before closing the Front Wheel Quick Release.



Holding the Handlebars and the Saddle, lift the bike upwards by the Saddle and allow the Swinging Arm to unfold until the Rear Instant Rebound Catch clicks shut

Press the Rear Instant Rebound Catch to make sure it is securely closed.



Rotate the Handlebars clockwise to the riding position.

To unfold the pedal, rotate the pedal body outwards, until the mechanism snaps closed.

IMPORTANT SAFETY NOTICE:
Make sure the Front Wheel Quick Release and the Front and Rear Instant Rebound Catches are pressed fully closed before riding

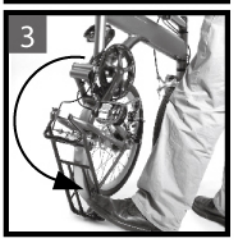
IMPORTANT SAFETY NOTICE:
Make sure the rider completes the quick 'pre-ride safety check' before every trip

TO LAZY FOLD YOUR ORI STANDING ON THE RIGHT HAND SIDE OF THE BIKE:

For Flight 'derailleur' bikes shift the chain into the middle of the sprockets before starting the folding procedure.

Rotate the pedals so that the right-hand Crank Arm points toward the centre of the rear wheel.

Lift the rear Instant Rebound Catch and release the back of the bike (Swinging Arm) from the Main Frame by continuing to lifting the Instant Rebound Catch upwards.

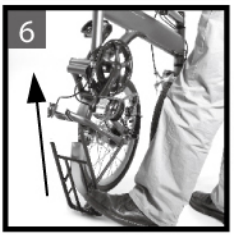


Still holding the Handlebars against the End Stop, continue to lift the bike upwards and fold the Swinging Arm under the mainframe.

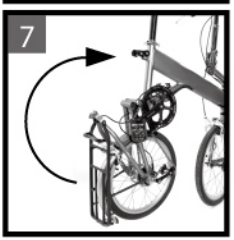
Place the bike back down on the ground. The bike should be sitting on the Rear Rack.

IMPORTANT SAFETY NOTICE: Make sure the Front and Rear Instant Rebound Catches are pressed fully closed before riding.

The bike should be sitting on the Rear Rack.



Holding the Handlebars and the Saddle, lift the bike upwards by the Saddle.

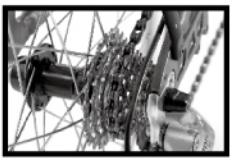


Continue to lift the bike upwards and allow the Swinging Arm to unfold until the Rear Instant Rebound Catch clicks shut.

Press the Rear Instant Rebound Catch to make sure it is securely closed

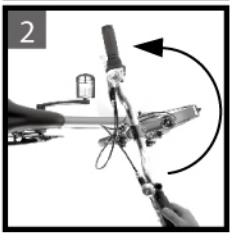
IMPORTANT SAFETY NOTICE: Make sure the rider completes the quick 'pre-ride safety check' before every trip.

TO FOLD YOUR ORI STANDING ON THE RIGHT HAND SIDE OF THE BIKE:

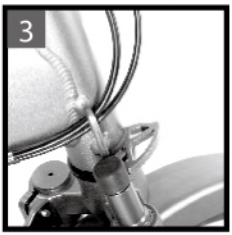


For M9 'derailleur' bikes shift the chain into the middle of the sprockets before starting the folding procedure.

Rotate the pedals so that the right-hand Crank Arm points toward the centre of the rear wheel.

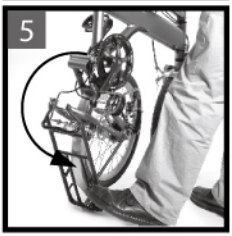


Rotate the handlebars anti-clockwise as far as they will go and hold against the end stop.



Continue to hold against the end stop and....

Lift the rear IRC Catch and release the back of the bike (Swinging Arm) from the Main Frame by continuing to lifting the IRC Catch upwards.



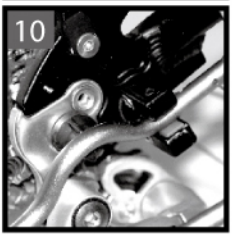
Continue to lift the bike upwards and fold the Swinging Arm under the mainframe.

Place the bike back down on ground. The bike should be sitting on the Rear Rack.

Supporting the bike, undo the Front Wheel Quick Release.

Open the Fork Leg Dropout Catch. This will release the Front Wheel and Mudguard from the Front Forks. Let it swing down until it touches the ground.

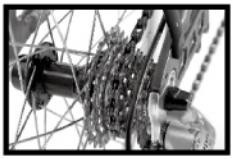
Holding the Handlebars against the End Stop, lean the bike away from you and swing the Front Wheel towards the middle of the bike, holding on to the Front Wheel Quick Release Lever.
On the Flight model if the spokes hit the rear mech rotate the wheel slightly to avoid contact.



When the mudguard strut lines up with the clip catch push it in to lock it in place. It will click in and hold.

IMPORTANT SAFETY NOTICE: Make sure you close the Seat Post QR after the Saddle has been lowered if you intend to lift and carry the bike by the saddle nose.

TO FOLD YOUR ORI STANDING ON THE RIGHT HAND SIDE OF THE BIKE:



For M9 'derailleur' bikes shift the chain into the middle of the sprockets before starting the folding procedure.

Open the Seat Clamp Quick Release and slide the Seat Post down in to the frame as far as it will go. Do not lift the bike in the folded position unless the Seat Post is fully lowered and clamped.

Pushing the Secondary Safety Catch to the side, open the Front IRC Catch.

Fold down the Handlebars to the side of the bike.

Stow the pedals by pushing inward towards the bike, on the outside edge of the pedal body, then folding downwards.

TIPS FOR CARRYING THE ORI:
We recommend for ease of use.

Unfolded: The easiest way to carry the ORI is to hold the bike with one hand placed under the Mainframe and the other holding the handlebars, either at the handlebar grip, or on the steering column.

Folded: There are two preferred ways of carrying the ORI when folded.
1. When lowering the saddle, twist the nose of the saddle slightly away from your body, and lift using the nose of the saddle. This should let the bike hang naturally away from your body.
2. Place your hand underneath the mainframe, in line with the nose of the saddle.

WWW.ORIBIKES.COM

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